Hydrogen cyanide HCN NO.12L

Performance

Measuring Range	0.36 to1.25 ppm	1.25 to2.5 ppm	2.5 to 60 ppm	60 to120 ppm
Number of Pump Strokes	5	2	1	1/2
Correction Factor	1/7	1/2	1	2
Sampling Time	2 minutes per pump stroke			
Detecting Limit	0.1 ppm (n=5)			
Colour Change	Yellow→ Red			
Reaction Principle	Hydrogen cyanide reacts with mercuric Chloride to form the hydrogen chloride then discolours the indicator to red. $2HCN + HgCl_2 \rightarrow Hg(CN)_2 + 2HCl$ HCl + Base → Chloride product			
Coefficient of Variation	10% (for 2.5 to 20 ppm), 5% (for 20 to 60 ppm)			
Shelf Life	2 Years			
Corrections for temperature & humidity	Humidity correction is necessary			
Store the tubes at cool and dark place.				

Possible coexisting substances and their interferences

Substance	Concentration	Interference	Change colour by itself
Sulphur dioxide	≧20 ppm	Plus error	Red discoloration
Hydrogen sulphide	≧5 ppm	Plus error	Red discoloration

Other substance measurable with this detector tube

Substance	Correction Factor	Pump Strokes	Measuring Range
Acetone cyanohydrine	1.15	1	2.88 to 69 ppm
Boron trichloride	by scale	2	0.5 to 20 ppm

Calibration gas generation Permeation tube method

TLV-TWA	TLV-STEL	Explosive range
-	C 4.7 ppm	5.6 to 40%